## **ORIGINAL**

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#### VIA HAND DELIVERY

Magalie Roman Salas, Secretary Federal Communications Commission The Portals, 12th Street Lobby 445 12th St., SW, Counter TW-A325 Washington, DC 20554

> Ex Parte Presentation Re:

> > IB Docket No. 99-81 ET Docket No. 95-18

RM-9328

Dear Ms. Salas:

Pursuant to Section 1 1206 of the Commission's rules. I hereby notify you that yesterday David Otten of Celsat America, Inc. ("Celsat") and I met with Julius Knapp, Geraldine Matise, and Sean White of the Commission's Office of Engineering and Technology. At the meeting, Mr. Otten made a brief presentation concerning Celsat's proposal to provide mobile satellite service in the 2 GHz band. In this regard, Mr. Otten distributed the enclosed materials to the individuals present at the meeting. In addition, we discussed the Commission's proposals concerning the reimbursement of incumbent users in the 2 GHz band for their costs of relocating to another band.

Please direct any questions concerning this matter to the undersigned.

Very truly yours,

Brian Weimer

**Enclosures** 

Julius Knapp CC: Geraldine Matise Sean White

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# "Cheaper, Better, Faster" Mobile Satellite Communications

### BREFING

January, 2000

David D. Otten Chairman and CEO Celsat America, Inc.

## Celsat America, Inc. History

#### 1991 - 1993

- Developed Technical and Business Concepts
- First U.S. Patent Granted

#### 1994 - 1996

- Additional U.S. Patents Granted
- Investment by Cellular Communications, Inc.
- Hughes, Ericsson, Nortel, and Cellular Communications, Inc. Support

#### 1997 - Present

- Investments by Echostar DBS Corp., George Schmitt, and Bill Ginsberg
- Sale of Seven Billion Minutes of Air Time to GSM Alliance (LOI)
- FCC License Expected
- Additional U.S. and Foreign Patents Granted
- Continued Support From Ericsson
- Investment Bankers: DLJ and B of A Securities

## Celsat Advantages

#### Low Prices

- 8 Cents per Minute Anywhere in the U.S.
- 1 Cent per Minute Breakeven

#### Rapid Time to Service

- Commercial Service With One Satellite

#### Voice + Data Capability

High Speed Mobile Internet Access

#### Dual Mode Satellite/Terrestrial Handhelds

Same Size as PCS Phones

#### **Low Cost System**

- Breakeven with 250,000 Subscribers

# CELSAT Complementary to PCS

### PCS Covers About 10% of the U.S. Geography

- All Digital
- Excellent Voice Quality
- Full Features

#### Cellular Covers Over 70% of U.S. Geography

- Typically Analog

## The GSM Alliance Companies Will Be Part of Celsat's Customer Base

**COMPANY** 

NUMBER OF POPS

LICENSED

VoiceSiream

220 million

Near Nationwide

(More POPs Than

**ATT or Sprint**)

Southwest

Pacific Bell Mobile Services 31 million

25 million

Canada

ARRA

Microcell
Telecommunications, Inc.
Powertel, Inc.

24 million

Southeast

**BellSouth Mobility DCS** 

13 million

Southeast

## Low Cost Bluetooth Enhanced Internet Access

#### Outbound Link For Dish or Direct TV Internet Subscribers

- 2 MBPS
- Competitive With Cable

#### Remote Mobile PCS Internet Access

- 384 Kbps Inbound and 96 Kbps Outbound
- Greatly Expanded Coverage, Including Aircraft

#### Personal Digital Assistant Internet Access

- Coverage Everywhere, Including In Buildings

#### 2 MBPS Home Installation

## System Fundamentals

Compa <b>ny</b>	Satellites Needed Initially	Initial System Cost	Coverage	Maximum U.S. Clircuits	Signal Margin	Relative cost per voice call
<b>Iridium</b>	66 Plus Spares	\$5.0 Billion to \$8 Billion	World Wide	4,000	16db Meximum	<b>260</b>
ico	12	\$4.6 Billion	World Wide	4,000	8 - 10db	30/10
Globalstar	48 Plus Spares	\$3.3 Billion Plus Ground Stations	World Wide	4,000	8db Maximum	125
Celsat	1 Plus Spare	\$0.75 Billion	U.S., Canada, and Mexico	50,000 Per Satellite	16 - 22db	1

**Source: FCC and SEC documents and Celsat Estimates** 

## Celsat Is The Most Competitive

	Price Per Minute	Fandset Prior	Maximum Data Rate	Dual Mode Phone	Average RF Power	Satelite In Arch Required	Microwave Oven or Bluetooth Wipe Out?
Iridium	\$3.00 to \$7.00 retail	\$1,000 +	2.4 Kbps	Bijsk With Belling Antenna	0.5 Wait	Many	No
ico	\$2.00 retail	\$700	64 Kbps	Larger Than Celsat's	8.5 West	Some	No
Globalstar	\$1.50 retail	\$1,000	9.6 <b>Kbps</b>	Brick With Hot Dog Antenna	0.5 Watt	Many	Yes
Celsat	\$0.08 wholesale	Free	Fixed: 2 Mbps Mobile: 384 Kbps	Small, User Friendly PCS Phone	0.25 Watt	None	No

Source: FCC and SEC documents, press coverage, and Celsat Estimates

# "Cheaper, Better, Faster" Than Iridium, Globalstar, and ICO

High Speed Internet — Up to 2 Megabits Per Second
Smaller, Lower Power PCS Size Handset
Higher Signal Margin
Celsat Will Serve a Proven and Rapidly Growing Market
Service — Pennies a Minute, Not Dollars a Minute
Start With 1, Not 66, 48, or 12 Satellites

- Faster, Simpler and Cheaper by Far
- Respects "Otten's Law"

## Other Regional GEOs

#### Potential Regional GEO systems include:

- ACeS (coverage of Indonesia and South East Asia)
- Thuraya (coverage of Moslem countries, India, Europe
- All of the above utilize 12 meter reflectors
  - Celsat has more than twice the capacity for the same cost

Financial and Technical Support From Major Satellite Manufacturers

## Speed of Light Transmission Effect

#### No Impact on:

- Internet Usage
- Pax
- Paging
- Data

Echo Cancellers Minimize any Problems for Voice

High Gain, Multi-Beam Satellite Antenna

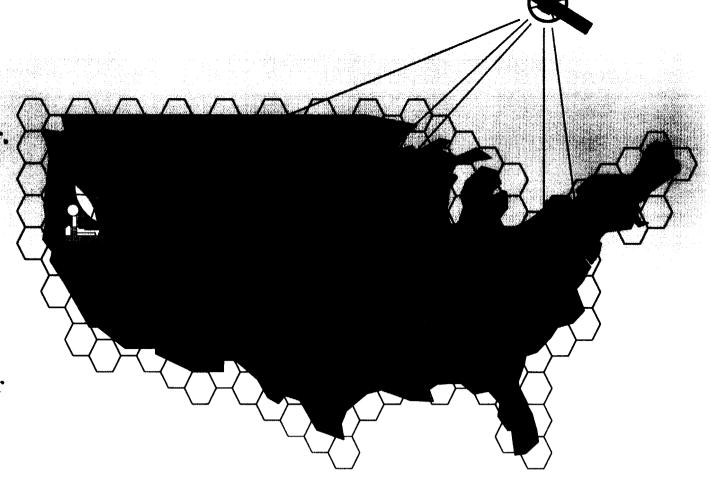
120 Transponders Per Satellite.

20 Meter Satellite Antenna Diameter.

1/2 Degree 3dB Beamwidth, ~50dB Gain.

100 Miles Cell Radius on Earth.

Beams Always at Least 36 Degrees Above Horizon for the US, except Alaska.

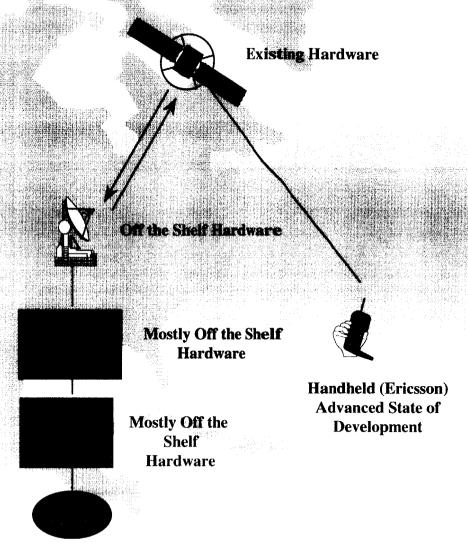


## Technology Fully Proven

Satellite Bus, Payload and 21m S-Band Multi-Beam Antenna Are Proven In-Use Designs.

Ground Gateway Network & Base Station Utilize Mostly Existing Feeder Station and Cellular/PCS Hardware.

**Dual Mode Terminal - Advanced State of Development** 



Proprietary & Confidential to Celsat America, Inc.

### Celsat's Patent Summary

#### Dual Mode Satellite and Ground Mobile Communications System

U.S. Patents 5,073,900; 5,339,330; 5,832,379; 5,940,753; & 5,995,832

#### **Power Control**

U.S. Patents 5,446,756 & 5,878,329

#### Coexistence with Incumbent Fixed Services

- U.S. Patent 5,511,233

#### **Position Determination**

- U.S. Patent 5,612,703

#### **Fraud Prevention**

- U.S. Patent 5,835,857

## SUMMARY OF CELSAT'S ADVANTAGES

#### Best Service

- High Voice Quality
- Enhanced Services
- Full North American Coverage

#### Lewest Cost

- Pennies a Minute
- LOI for Sale of Seven Billion Minutes
- 1 Satellite to Initiate Commercial Service

#### Proven, Innovative Technology

- High Gain 20 Meter Antenna
- Multiple Beams
- 9 U.S. Patents Issued

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